

### REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-8 remain active. Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,980,726 to Moulthrop, Jr. et al. (herein "Moulthrop"); Claim 1 was rejected under 35 U.S.C. § 103(a) as unpatentable over WO 01/77412 to Tojo et al. (herein "Tojo'105"); Claims 2-8 were rejected under 35 U.S.C. § 103(a) as unpatentable over Tojo'105 in view of U.S. Patent No. 4,790,859 to Marumo et al. (herein "Marumo"); Claim 1 was rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. 2004/0007457 A1 to Tojo et al. (herein "Tojo'457"); Claims 2 and 4-8 were rejected under 35 U.S.C. § 103(a) as unpatentable over Tojo'457 in view of Marumo; and Claim 3 was rejected under 35 U.S.C. § 103(a) as unpatentable over Tojo'457 in view of Marumo and further in view of Tojo'105.

Considering first the interpretation of the means plus function language contained in Claims 2, 4 and 7-8. It is to be noted that all claims have been amended such that the claims no longer contain terms written in means plus function format.

Considering next the rejection of Claim 1 under 35 U.S.C. § 102(b) as anticipated by Moulthrop, that rejection is traversed.

Claim 1 is amended to include *a compartment containing a first adsorption unit that adsorbs hydrogen fluoride from fluorine gas discharged from an anode chamber and a compartment containing a second adsorption unit that adsorbs hydrogen fluoride from hydrogen gas discharged from a cathode chamber.* Moulthrop does not teach a compartment containing a first adsorption unit or a compartment containing a second adsorption unit. Thus, it is believed that the rejection of Claim 1 as anticipated by Moulthrop has been traversed.

Considering next the rejection of Claim 1 under 35 U.S.C. § 103(a) as unpatentable over WO 01/77412, that rejection is traversed.

The Office Action indicates U.S. Patent No. 6,518,105 is the national stage entry and an English equivalent of WO 01/77412.<sup>1</sup> Applicants understand the national stage entry of WO 01/77412 to be U.S. Patent No. 6,818,105 and believe that this was the patent the Examiner was referring to when discussing Tojo'105 throughout the Office Action. Thus, Applicants will refer to the teachings of U.S. Patent No. 6,818,105 in response to the Examiner's rejections. Further, this patent will be herein referred to as "Tojo'105".

Turning now to the applied prior art, Tojo'105 discloses an apparatus for generating fluorine gas. As stated in the Office Action<sup>2</sup>, Tojo'105 does not explicitly teach the at least two compartments claimed in Claim 1. The Office Action argues that it would have been obvious to one of ordinary skill in the art to have split the fluorine gas generator into three different compartments to minimize the potential negative effect of a mishap.<sup>3</sup> However, the Office Action does not disclose any prior art in which a fluorine gas generator is split into three different compartments comprising one for the electrolyzer, one for the post-treatment process of the hydrogen gas from the cathode chamber and one for the post-treatment process of the fluorine gas produced from the anode chamber as Claim 1 now requires.

Additionally, Applicants submit there was no suggestion or motivation of the knowledge generally available to one of the ordinary skill in the art to modify Tojo'105 to include three separate compartments. As discussed in the last paragraph bridging pages 2-3 of the specification, one of the problems the claimed invention is meant to solve is to provide a fluorine gas generator with which the gases used or generated can be prevented from mixing together as far as possible in case of gas leakage and can be treated safely without allowing them to escape to the outside and with which maintenance, exchange and other

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<sup>1</sup> Office Action, last paragraph bridging pages 3-4.

<sup>2</sup> Office Action, second full paragraph on page 4, lines 1-2.

<sup>3</sup> Office Action, second full paragraph on page 4, lines 2-7.

operations can be carried out with ease. The claimed invention accomplishes this by providing a box-shaped body divided into separate compartments thereby separating the electrolyzer, the first adsorption unit, and the second adsorption unit, as discussed in the last paragraph bridging pages 3-4 of the specification. Thus, any gas leaking into one compartment will not mix with gas that may leak into another compartment. Therefore, a substantially single component gas can be treated in each compartment and improvements in safety and maintenance can be achieved. These improvements would not have been obvious to one of ordinary skill in the art. Thus, Applicants respectfully submit the Office Action has not provided a *prima facie* case of obviousness with regard to Claim 1. Accordingly, Applicants respectfully request that the rejection of Claims 1 under 35 U.S.C. § 103(a) as unpatentable over Tojo'105 be withdrawn.

Considering next the rejection of Claims 2-8 under 35 U.S.C. § 103(a) as unpatentable over Tojo'105 in view of Marumo, that rejection is traversed.

With regards to Claim 2, Applicants submit the cited prior art does not teach three separate compartments comprising an electrolyzer, a second compartment containing the first adsorption unit, and a third compartment containing the second adsorption unit. Additionally, Marumo does not teach the claimed separate compartments, and the Office Action does not argue that Marumo does. Thus, Applicants respectfully submit the Office Action has not provided a *prima facie* case of obviousness with regard to Claim 2 or any claim depending therefrom. Accordingly, Applicants respectfully request that the rejection of Claims 2-8 under 35 U.S.C. § 103(a) as unpatentable over Tojo'105 in view of Marumo be withdrawn.

Considering next the rejections of Claim 1 under 35 U.S.C. § 103(a) as unpatentable over Tojo'457, the rejection of Claims 2 and 4-8 under 35 U.S.C. § 103(a) as unpatentable over Tojo'457 in view of Marumo, and the rejection of Claim 3 under 35 U.S.C. § 103(a) as

unpatentable over Tojo'457 in view of Marumo and further in view of Tojo'105, these rejection are also traversed.

Applicants note that Tojo'457 qualifies as prior art under 35 U.S.C. § 102(e) as the present application filing date predates the issue date of Tojo'457. As Tojo'457 is 102(e) art, the obviousness rejections are deficient under 35 U.S.C. § 103(c). Applicants state the present application and the Tojo'457 reference were, at the time the invention was made, owned by or subject to an obligation of common assignment to Toyo Tanso Co., Ltd. Accordingly, application of the Tojo'457 reference in this obviousness rejection is improper. As the Examiner's rejections in Office Action paragraphs 8-10 of Claims 1-8 all rely on Tojo'457, Applicants respectfully submit that these rejections are traversed as Tojo '457 may not be applied as a basis for supporting a *prima facie* case of obviousness as outlined by 35 U.S.C. § 103(c).

In view of the foregoing, an early and favorable Office Action is believed to be in order and the same is hereby respectfully requested.

Respectfully submitted,

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